who received Palonosetron have not vomited through out the chemo while 33% of Ondansetron group.

Conclusion: Even though Palonosetron is manufactured for oncology patients, it is used for haematology patients. In our study Palonosetron was compared to Ondansetron. According to our study Palonosetron made a significant difference in preventing and reducing the CINV. Unfortunately the data was collected retrospectively for the Ondansetron group. Because of low number the outcome data could not be transferable to the whole patient group.

580

RETROSPECTIVE STUDY TO DEFINE THE ULTIMATE TIMING FOR STARTING STEM CELL COLLECTION IN THE AUTOLOGOUS SETTING AND TO COMPARE ENGRAFTMENT DATA OF PATIENTS WHO ACHIEVE TARGET DOSE IN GREATER THAN 4 VERSUS LESS THAN 4 COLLECTIONS

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Peripheral blood stem cell collection after high dose chemotherapy for autologous transplantation has been done routinely in many institutions over the years; however, the criteria for starting harvest are not standardized. Most institutions agree that circulating peripheral blood CD^{34+} cells is the strongest indicator for planning Apheresis, but the timing of Apheresis collection remains controversial. Optimization of PBSC collection for autologous stem cell transplant is necessary for good standard of care and cost-effectiveness. Most studies have concentrated on identifying peripheral blood CD^{34+} thresholds that would result in good cells yields in fewer apheresis days. Based on these results the apheresis timing proposed are 5-30 circulating peripheral blood CD^{34}+ cells.

The emergence of new mobilization strategies and rising healthcare costs has brought about a practice change. This tertiary cancer center did a retrospective study to 1.) determine the optimal timing for starting PBPC collections by evaluating if patients are more likely to reach a target number of $> / = 5x10^6$ CD^{34+} cells if Apheresis is started when peripheral blood circulating CD^{34+} cells are $> / = 15$ cells per micro liter compared to starting Apheresis when peripheral blood circulating CD^{34+} cells are less than 15 cells per micro liter. 2.) To evaluate if engraftment is affected when target dose of $> / = 5x10^6$ CD^{34+} cells are collected in $< / = 4$ Apheresis days compared to those patients who reach target dose in > 4 Apheresis days.

In this IRB approved retrospective study we reviewed the chart of all autologous stem cell transplant patients collected from Jan. 1, 2007-Dec. 31, 2007. We recorded the CD^{34+} count on the day of collection and compared to see if there was a significant difference in the number of stem cells collected between the patients who were collected with a circulating CD^{34+} cell count of less than 15 per micro liter and those who collected with a CD^{34+} count of 15 or higher. We will correlate to find is there is a significant difference in the number apheresis collections required to collect the target dose, and if there is a difference in engraftment when patients start the apheresis procedure with a circulating CD^{34+} cell count of 15 or higher versus those who start collection when the circulating CD^{34+} cell count is less than 15. Analysis in ongoing, however preliminary data suggests that there is not a significance difference in engraftment between the two groups.

581

CAREGIVERS HELPING IN RELIEVING PAIN – C.H.I.R.P. PROJECT

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Children who undergo hematopoietic stem cell transplant experience significant pain and discomfort related to the side effects of treatment. Standard methods of analgesia delivery, specifically patient controlled analgesia (PCA), are not appropriate for young children as they do not have the cognitive ability to connect their pain to alleviation with operating a PCA demand button. Currently, Duke University Hospital policy does not allow caregivers to push the button due to concerns for patient safety. Therefore, an adult caregiver in conjunction with the nursing staff must assess the pain and intervene for the child. This process is a setup for delay in pain treatment when nursing staff are busy with other tasks and unable to push the PCA button when it is needed.

The *CHIRP study* will examine the feasibility and acceptance of caregiver education in operating the PCA demand button in young pediatric BMT patients who require pain control. This study will evaluate the preparation of caregivers in assessing their child's pain and sedation levels while operating the PCA demand button. The hypothesis is that inclusion of the family in the delivery of pain medications will yield equivalent or better outcomes and facilitate transition to home.

Thirty children and families will be enrolled on this IRB approved protocol. A dedicated study coordinator will provide comprehensive education using different educational modalities. Materials are provided in written and video format to review. The focus of the education is to provide the caregiver with basic knowledge of pain and sedation assessment tools, basic knowledge of analgesia and side-effects, and when to recognize signs of distress. A post-test must be passed for the caregiver to be an authorized operator of the PCA demand button. Staff education is provided so that they can guide caregivers with their assessment skills. When patients no longer need analgesia the caregivers complete a survey to collect 1) their perceptions of safety, 2) their ability to determine when their child was in pain, 3) their perceptions of effective and prompt intervention for their child's pain, and 4) overall satisfaction with pain control for their child.

582

THE TRANSITION FROM PARENT TO PATIENT DURING HEMATOPOIETIC STEM CELL TRANSPLANT

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The experience of being a parent is completely transformed at the moment of cancer diagnosis, and a greater disequilibrium occurs in the patient's life when treatment includes a hematopoietic stem cell transplant (HSCT). A review of the literature sites that role changes can be greatest for parents raising dependent children as they quickly transition from parent to patient and attempt to treat and eradicate their disease, while still trying to grasp and hold on to the strings of "normalcy" as their child's parent (Coyne, 2009; Billhult & Segesten, 2003). Today, nurses who care for HSCT patients continue to observe the treatment to be both physically and emotionally high-risk due to increased vulnerability of deadly infections and stress during the prolonged hospitalization. Although there has been significant research on coping with cancer treatment, there is only limited research on the specific experience of parents with dependent children who are treated with a HSCT. This phenomenon from parent to patient in the environment of HSCT requires greater research in order to improve nursing care that is sensitive to the emotional and social changes that result due to intense treatment, lengthy hospitalization, and restricted interaction with their dependent children in an effort to reduce exposure to infection.

The purpose of this descriptive phenomenological research study proposes to understand the experience of HSCT treatment and the physical, emotional, and social changes that transpire for parents with dependent children; battling to regain health, defeat cancer, and maintain their role as their child's parent. The Transition Theory (Meleis, 2010) is also incorporated to provide clarity to the phenomenon. Overall, through the proposed research greater nursing knowledge will be developed to help parents cope with the role changes during HSCT.